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EXAMINER

THIER, MICHAEL

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/658,725
Filing Date: September 09, 2003
Appellant(s): FRANK ET AL.

Kirk A. Vander Leest
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9/16/2010 appealing from the Office action mailed 5/3/2010.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:
Claims 1-25 stand rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

6978144	Choksi	12-2005
20030134650	Sundar et al.	7-2003
7089016	Dokko	8-2006

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choksi (US 6978144) in view of Sundar et al. (US 2003/0134650) in further view of Dokko (US 7089016).

Regarding claims 1, 9, and 17. Choksi discloses a method, system, and machine readable storage for providing bandwidth management in a hybrid wired/wireless local area network (Abstract, column 4 lines 18-26), the method comprising:

receiving from at least one of a first access point and a first switch, at least a first messaging protocol message (call admission request is submitted- Column 7, Lines 5-15 and 33-41);

responsive to said first messaging protocol message, determining an available communication bandwidth for at least a portion of the hybrid wired/wireless local area network (current bandwidth usage plus the requested bandwidth must not exceed a threshold - Column 7, Lines 61-67; Column 8, Lines 1-5; radio link can be an 802.11 based WLAN Column 3, Line 35); and

allocating bandwidth to accommodate said communication session (read as the request is allowed- Column 8, lines 1-5).

However, Choksi discloses the allocation of resources and allowance of call admission requests, but fails to specifically disclose the notification to the first access point of the communication system to commence the connection.

Sundar discloses a call connection management system for hybrid wired/wireless (WWAN and WLAN) networks which performs call setup functions such as channel assignment based upon requests from users. During the call connection setup, initiated by, for example, a handoff scenario, the serving BSC informs the desired BSC of the desire to handoff, and once the operation is the complete, acknowledgements are returned to the initiating parties (Figure 12 - Page 6, Paragraphs 0074-0075).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teachings of Sundar with the teachings as in Choksi in order to provide users with necessary bandwidth to complete their communications and control a network so that it's bandwidth capabilities are not exceeded.

However, Choksi and Sundar do not specifically disclose that the first messaging protocol message is for establishing a communication session.

Dokko teaches a channel allocation system and method for radio data calls having different bandwidths (title and abstract). He teaches in column 4 lines 18-21 and 28-33 that a call set up request is received from the call processing unit 11 (which is a part of the mobile switching system 10 as shown in figure 1), and after the data call connection request is received, the system determines the required/allocated bandwidth based on the service option of the corresponding data call. Therefore, the data call

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connection request received from the call processing unit in the mobile switching system clearly reads on the claimed first messaging protocol message for establishing a communication session received from at least one of a first access point and a first switch.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teachings of Dokko with the teachings as in the combination of Sundar and Choksi. The motivation for doing so would have been to create a channel allocation method and system that prevents traffic delay and effectively utilizes channel resources by allocating a channel according to bandwidth required by each call. (Dokko column 2 line 65 to column 3 lines 2)

Regarding claims 2, 10, and 18. Choksi as modified by Sundar and Dokko further discloses receiving said at least a first messaging protocol message by at least one of a second switch and a second access point (Sundar et al. - the serving WLAN MSC informs the desired WWAN BSC of the handoff requests - Figure 12, Steps 1204-1210 - Page 6, Paragraph 0074).

Regarding claims 3, 11, and 19. Choksi as modified by Sundar and Dokko further discloses requesting bandwidth usage information from at least one of said first access point and said first switch using said at least a first messaging protocol (Choksi - call admission request are single bandwidth requests - Column 7, Lines 42-48).

Regarding claims 4, 12, and 20. Choksi as modified by Sundar and Dokko further discloses de-allocating said allocated bandwidth using at least a third messaging protocol message subsequent to termination of said established communication session

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(Sundar et al. - once the mobile has handed off to the WWAN, the WWAN notifies the WLAN MSC that it may clear the resources previously allocated for the mobile - Figure 12, steps 1226-1228 - Page 6, Paragraph 0074).

Regarding claims 5, 13, and 21. Choksi as modified by Sundar and Dokko further discloses sending said at least a third messaging protocol message from at least one of said second switch and said second access point to at least one of said first switch and said first access point (Sundar et al. - once the mobile has handed off to the WWAN, the WWAN notifies the WLAN MSC that it may clear the resources previously allocated for the mobile - Figure 12, steps 1226-1228- Page 6, Paragraph 0074).

Regarding claims 6, 14, and 22. Choksi as modified by Sundar and Dokko further discloses receiving bandwidth information from at least one of a quality of service management process, a load balancing management process, a session control process, and a network management process using at least a fourth messaging protocol message (Choksi – QoS policy is retrieved during the bandwidth allocation request- Column 6, Lines 60-67 and Column 7, Lines 5-15).

Regarding claims 7, 15, and 23. Choksi as modified by Sundar and Dokko further discloses requesting said bandwidth information from said quality of service management process, said load balancing management process, said session control process, and said network management process using a fifth messaging protocol message (Choksi – QoS policy is retrieved during the bandwidth allocation request - Column 6, Lines 60-67 and Column 7, Lines 5-15).

Regarding claims 8, 16, and 24. Choksi as modified by Sundar and Dokko

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further discloses that said first, second, third, fourth, and fifth messaging protocol messages each comprise at least one message selected from the group consisting of an access point status message, access point configuration message, a switch status message, a switch configuration message, a client status message, and a device discovery message (Choksi - the messages request the status of the access points, hence gaining their status and configuration - Column 7, Lines 42-47; Sundar et al. - device discovery is used to determine available networks - Page 4, Paragraphs 0055-0057; Sundar et al. - BSCs determine statuses of access points to perform call connections- Page 6, Paragraph 0074).

Regarding claim 25. Choksi as modified by Sundar and Dokko further discloses that at least one controller is a bandwidth management controller, a quality of service controller, a load balancing controller, a session controller, and a network management controller (Choksi- Column 4, Lines 18-46).

(10) Response to Argument

Appellant argues that Choksi, Sundar, and Dokko do not disclose "...notifying said first access point of said allocated bandwidth using at least a second messaging protocol message..." (Appeal Brief page 7 under heading A.) Further, Appellant states that Sundar is not at all concerned with bandwidth capabilities, nor does he disclose providing a notification to an access point of allocated bandwidth. (Appeal Brief page 9)

In response to Appellant's argument, the examiner would like to note that it was previously shown in the rejection that Choksi discloses the allocating bandwidth to accommodate said communication session and allowance of call admission requests, but failed to specifically disclose the idea of notifying the first access point of the connection. Sundar was simply combined to show the obviousness of notifying a first access point of a connection in a hybrid wired/wireless LAN. Sundar discloses that during a call connection setup, initiated by, for example, a handoff scenario, the serving BSC informs the desired BSC of the desire to handoff, and once the operation is the complete, acknowledgements are returned to the initiating parties. Therefore, the examiner understands the acknowledgement that would be returned from the new BSC to the serving BSC to read on the idea of notifying the first access point of a communication session. He does not specifically disclose the idea of notifying of the allocated bandwidth, however, Dokko teaches the idea of determining available bandwidth, and thus one of ordinary skill in the art at the time of invention would have seen it obvious to combine the teachings of the references to arrive at the idea of notifying of the allocated bandwidth (i.e. thus notifying of a new communication session) in order to provide users with necessary bandwidth to complete their communications and control a network so that it's bandwidth capabilities are not exceeded.

Appellant further argues, Choksi, Sundar, and Dokko do not disclose or suggest receiving from a first access point or a first switch, at least a first messaging protocol message for establishing a communication session within

the hybrid wired/wireless LAN. (Appeal Brief, page 11, last full paragraph)

In response to Appellant's arguments, the examiner respectfully disagrees. The claims were rejected using the combination of references, where Choksi was explained to teach the idea of receiving a first message protocol message, which can clearly be interpreted as the call admission request. Sundar was provided next to show the idea of a call connection management system for hybrid wired/wireless (WWAN and WLAN) that notifies the first access point of the connection. The examiner then asserted that Dokko teaches the idea of a data call connection request received from a call processing unit in the mobile switching system, which reads on the claimed first messaging protocol message for establishing a communication session received from at least one of a first access point and a first switch. Although, Dokko does not teach this communication session is within a hybrid wired/wireless local area network, this idea was clearly shown in the Sundar reference in the rejection and therefore, the combination of references clearly teaches the argued limitation and would have been obvious to one of ordinary skill in the art at the time of invention.

Appellant further argues, "...Choksi relates only to wireless cell networks and does not relate to a hybrid wired/wireless LAN". (Appeal Brief page 12)

In response to Appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.

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1986). The claims were rejected using the combination of references where Sundar clearly teaches the idea of the hybrid wired/wireless LAN, and therefore Choksi need not specifically be related to a hybrid wired/wireless LAN.

Appellant further argues that Dokko's call set up request inputted from a mobile subscriber is clearly neither a messaging protocol message, nor it is received from at least one of a first access point or a first switch. (Appeal Brief page 14)

In response to Appellant's argument, the examiner respectfully disagrees. Dokko clearly teaches the idea of receiving from a first access point or switch, a first messaging protocol message for establishing a communication session when he explains that a call connection request is received from the call processing unit 11 in column 4 lines 29-30 (i.e. which the call processing unit 11 is a part of the mobile switching system, and thus a connection request received from a first switch or access point). The examiner notes that the message may first be initiated at a mobile subscriber, as argued by Appellant, however, it is clear from column 4 lines 28-33 that a connection request is received from a first switch since he clearly states "Upon receiving the data call connection request from the call processing unit 11..." (i.e. where the call processing unit 11 is a part of the mobile switching system), and thus can be read on the claims as worded where the first messaging protocol message is received from a first switch (i.e. mobile switching system).

Appellant further argues that Dokko's call set up request is not used for the purposes of establishing a communication session within a hybrid wired/wireless LAN. (Appeal Brief page 14)

In response to Appellant's argument, the examiner respectfully disagrees. The examiner notes that although Dokko may not teach that the request is not for establishing a communication session within a hybrid wired/wireless LAN, it is for establishing a communication session, and as shown in the rejection, Sundar teaches the idea of communications in a hybrid wired/wireless LAN. Therefore, the combination would allow for a request for communication in a hybrid wired/wireless LAN and would have been obvious to one of ordinary skill in the art to allow creating a channel allocation method and system that prevents traffic delay and effectively utilizes channel resources by allocating a channel according to bandwidth required by each call.

Appellant further argues that the proposed combination does not disclose or suggest, wherein said receiving comprises receiving said at least a first messaging protocol message by at least one of a second switch and a second access point.

In response to Appellant's argument, the examiner respectfully disagrees. In par. 74 of Sundar, he clearly recites that the source MSC issues a facility directive to the target MSC, and thus clearly reads on a first messaging protocol message being received by a second switch or second access point.

Appellant further argues that the proposed combination does not disclose or suggest, requesting bandwidth usage information from at least one of said first access point and said first switch using said at least first protocol message.

In response to Appellant's argument, the examiner respectfully disagrees. Choksi teaches in column 7 lines 42-48 the idea that bandwidth usage may be passed to the bandwidth allocation controller from the BTSs. Thus, one of ordinary skill in the art would have found it obvious that bandwidth usage could be passed based on a request. Although Choksi does not specifically recite the bandwidth usage is requested, he does recite it is passed to the bandwidth allocation controller, and a simple request for the passage of the data would have been obvious to one of ordinary skill in the art at the time of invention.

Appellant further argues that the proposed combination does not disclose de-allocating said allocated bandwidth using at least a third messaging protocol message subsequent to termination of said established communication session.

In response to Appellant's argument, the examiner respectfully disagrees. Sundar teaches in par. 74 that the Target MSC (i.e. thus the second switch) sends a message indicating that the mobile is on channel with the target BSC. This message takes place after handoff is complete and causes a message to be sent indicating that any resources assigned may be cleared, thus reading on de-allocating said allocated bandwidth, since any used resources (i.e. bandwidth), is thus cleared.

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Appellant further argues that the proposed combination does not disclose or suggest sending said at least a third messaging protocol message from at least one of said second switch and said second access point to at least one of said first switch and said first access point.

In response to Appellant's argument, the examiner respectfully disagrees. Sundar teaches in par. 74 that the target MSC (i.e. thus the second switch) sends a message indicating that the mobile is on channel with the target BSC to the source MSC (i.e. first switch). This message reads on the third messaging protocol sent from at least one of the second switch and access point to at least one of the firsts switch and access point since it tells the source that the mobile is on a channel with the target and thus the source can then clear any resources assigned.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/MICHAEL T THIER/

Examiner, Art Unit 2617

11/22/2010

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